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FM 30-55

WAR DEPARTMENT

BASIC FIELD MANUAL



MILITARY INTELLIGENCE

IDENTIFICATION OF  
GERMAN NAVAL SHIPS

June 19, 1941

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**FM 30-55**

**BASIC FIELD MANUAL**



**MILITARY INTELLIGENCE**

**IDENTIFICATION OF  
GERMAN NAVAL SHIPS**

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**Prepared under direction of the  
Chief of Staff**



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WASHINGTON : 1941**

WAR DEPARTMENT,  
WASHINGTON, June 19, 1941.

FM 30-55, Military Intelligence, Identification of German Naval Ships, is published for the information and guidance of all concerned.

[A. G. 062.11 (5-2-41).]

BY ORDER OF THE SECRETARY OF WAR:

G. C. MARSHALL,  
*Chief of Staff.*

OFFICIAL:

E. S. ADAMS,  
*Major General,*  
*The Adjutant General.*

DISTRIBUTION:

(For explanation of symbols, see FM 21-6.)

R and H 1 (10), 4 (3); I Bn 1 (15); IC and H 4 (5).

~~RESTRICTED~~

FM 30-55

## **BASIC FIELD MANUAL**

### **MILITARY INTELLIGENCE**

#### **IDENTIFICATION OF GERMAN NAVAL SHIPS**

The material contained in this manual has been secured from many sources. It is the best material available, but may be incomplete and, in some respects, inaccurate.

This manual, containing illustrations with explanatory data relative to German naval ships, is published for limited distribution. It will be used for instruction of officers and men in the appearance and general characteristics of German naval vessels and will be safeguarded as prescribed in AR 380-5.

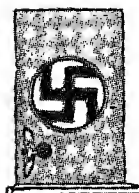
FLAGS



EMBLEM



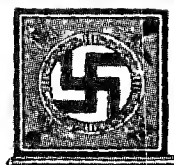
NATIONAL FLAG  
AND JACK



STATE SERVICE FLAG  
(Fleet Auxiliaries)



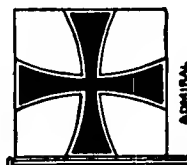
NATIONAL FLAG FOR MERCHANT  
SHIPS COMMANDED BY NAVAL  
RESERVE OFFICERS



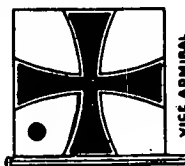
FÜHRER'S STANDARD



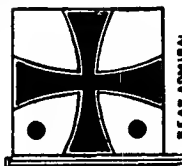
C-IN-C. OF NAVY



ADMIRAL



VICE ADMIRAL



REAR ADMIRAL



COMMODORE  
WHEN FLOWN FROM MAIN MAST  
(b) SENIOR OFFICER  
WHEN FLOWN FROM STAY



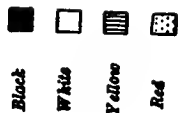
S. O. COM.  
MINESWEEPING  
DESTROYER OR  
SUBMARINE  
FLOTILLAS



COMMANDER OF A  
FLOTILLA



PENNANT



WHEN FLOWN FROM MAIN MAST,  
BUT LEADER'S PENNANT WHEN  
FLOWN FROM UPPER SIGNAL YARD

# UNIFORMS

Insignia of rank on sleeves

	Großadmiral and Admiral of the Fleet.		Admiral		Vizeadmiral. (Vice Ad.)		Konteradmiral. (Rear Ad.)		Kapitän zur See & Freizeitenkapitän (Captain) (Commander)		Korvettenkapitän. (Lieut.-Com.)		Kapitänleutnant. (Lieut., senior.)		Oberleut. 2. See. (Lieut., junior.)		Leutnant 1. See. (Sub-Lieut.)
<p>Flagg-offiziere.</p> <p>NOTE.—In above sketch, a star should replace devices which appear in the 5 junior ranks. Uniforms and distinguishing marks of rank are the same for officers of all branches of the service; but in place of the star on the sleeve, which distinguishes the military branch, there is worn by:</p> <p>Engineer Officers, a pinion wheel Medical Officers, the rod of Esculapius Accountant Officers, the winged staff of Hermes</p>								<p>Stabs-offiziere.</p> <p>As in sketches above.</p>				<p>Subaltern-offiziere.</p>					

The difference between a *Kapitän zur See* and a *Freigattenkapitän* is indicated by stars on the shoulder straps.  
*Kommodores* wear the same sleeve stripes as a *Kapitän zur See*, but with the cords and shoulder bands of a Flag Officer.

## NAVAL GUNS

Calibre	Usual Naval Designation.	Length in cals.	Date of Model.	Weight of Gun.	Weight of A.P. shot.	Initial Velocity.	Maximum penetration, direct impact, against R.C. at				Danger space against average ships at			Approximate Muzzle Energy.
							9000 yds.	6000 yds.	3000 yds.	10,000 yds.	5000 yds.	3000 yds.		
inch. 15 11 11	c/m. 38.7 28 28	... 40	'36 '28 '01	tons. ... 32.2	lbs. 670 661.4	foot-secs. ... 2756	in. ... 6	in. ... 10	in. ... 14	yards. ... 150	yards. ... 450	yards. ... 740	yards. ... 3000	foot tons. ... 31,600
8	20.3													
5.9 5.9 5	15 15 12.7	50 45	... '09	5.5 5	101.4	{ 3084 2920	... ...	... ...	... 5	... ...	... 200	... 420	... ...	6,690 5,990
4.1 4.1 4.1 3.5	10.5 10.5 10.5 90	45 50 A.A. A.A.	'16 '28	... ...	38.2	... ...	... ...	... ...	... ...	... ...	... ...	... ...	... ...	...

Brass cartridge cases to all guns

11 inch, 40 cal., M. '01 in *Schlesien* and *Schleswig-Holstein*.

*Lesser guns*: 3.4 inch (88 m/m) firing 22 lb. projectiles in modern and 15 lb. in old models.

*AA. guns*: 4.1 inch, 3.5 inch on H. A. mounts ("Flak").

*Projectiles*: Guns of 11 inch and over fire A. P., Ersatz A. P., H. E., and common shell.

All models have the recoil utilized to return the gun to firing position for pieces over 5.9 inch. In 5.9 in. springs are employed. German guns have a lower muzzle pressure than normally obtains.



GERMAN  
NAVY



BISMARCK

This illustration is from a magazine

IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIPS  
BISMARCK-TIRPITZ CLASS

BISMARCK-TIRPITZ CLASS

BISMARCK  
TIRPITZ

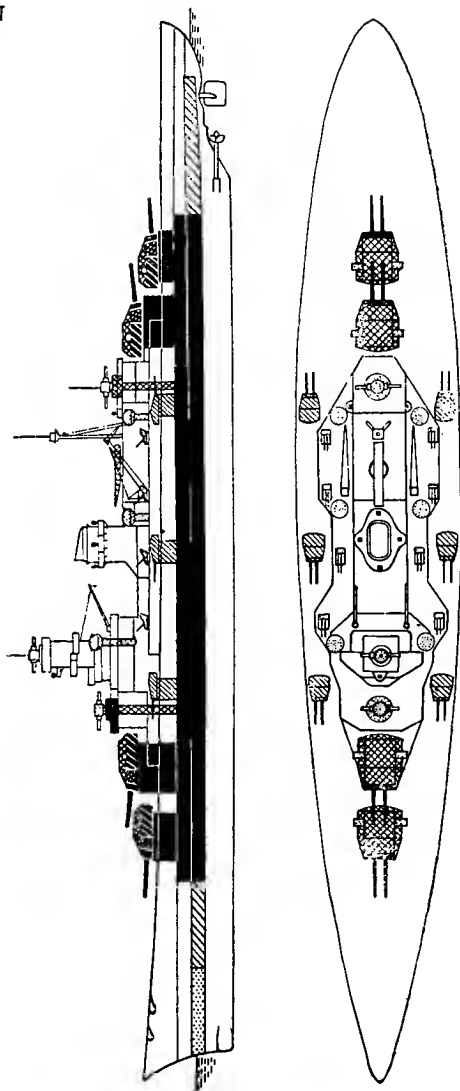
Description: 35,000 tons.  
793 feet (over-all) by 118 feet by 26 feet draft.  
30 knots (?).

Guns: 8-15 inch, estimated 50/52 caliber.  
12-5.9 inch.  
16-4.1 inch.

Torpedo tubes: None.

Airplanes: 4. Catapults: 2.

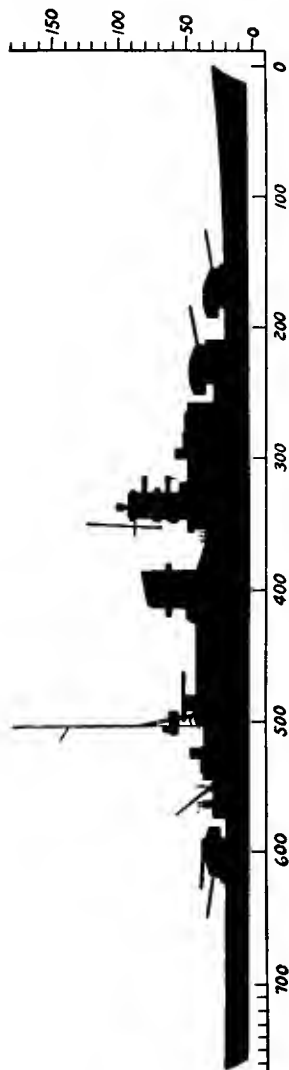
GERMAN  
NAVY



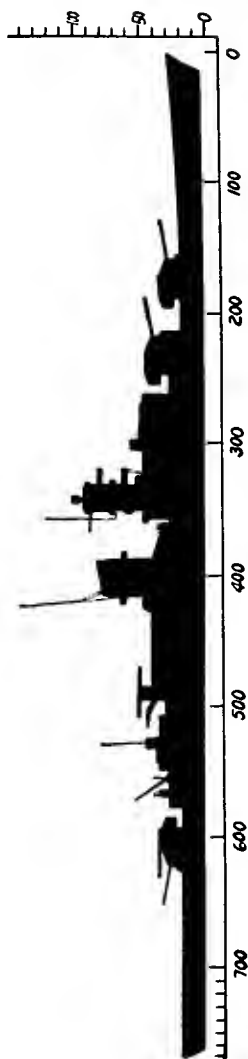
IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIPS  
BISMARCK-TIRPITZ CLASS

GERMAN  
NAVY



SCHARNHORST



GNEISENAU

# IDENTIFICATION OF GERMAN NAVAL SHIPS

## BATTLESHIPS SCHARNHORST CLASS

### COMPARISON SCHARNHORST CLASS

#### SCHARNHORST GNEISENAU

Description: 26,000 tons.  
742 feet (water-line) by 99 feet by 25 feet draft.  
30 knots (?).

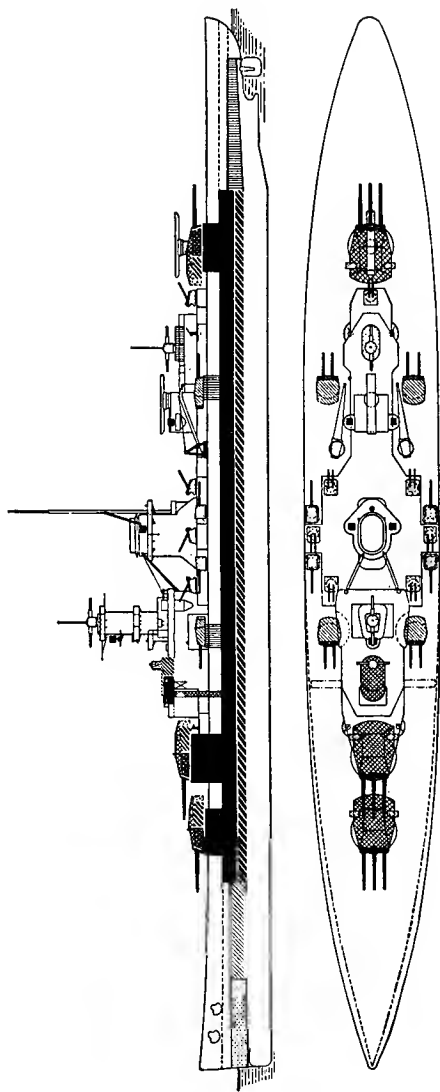
Guns: 9-11 inch.  
12-5.9 inch.  
14-4.1 inch.  
16-37-mm AA.  
Various smaller.

Torpedo tubes: None.

Airplanes: 4. Catapults: 2.

Remarks: Changes suspected but none confirmed. Gneisenau  
has higher slanting stack cap than Scharnhorst.

GERMAN  
NAVY



BATTLESHIPS  
SCHARNHORST CLASS



GNEISENAU



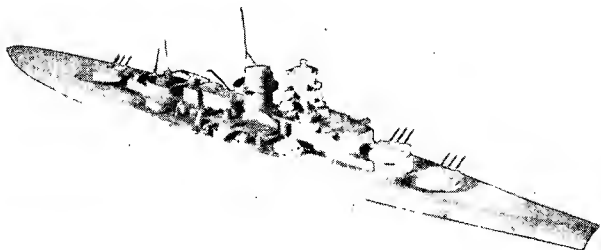
GERMAN  
NAVY



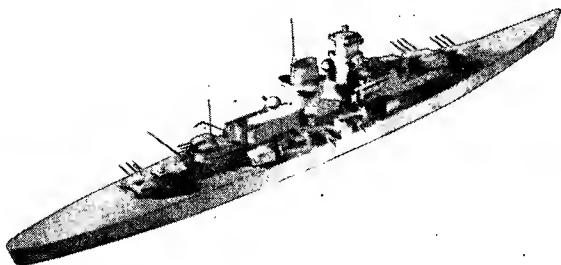
Changes suspected but none confirmed.

IDENTIFICATION OF GERMAN NAVAL SHIPS

BATTLESHIP  
GNEISENAU



45°.



135°. Depression angle 15°.

Description: 26,000 tons.  
742 feet (water-line) by 99 feet by 25 feet draft.  
30 knots (?).

Guns: 9-11 inch.  
14-4.1 inch.  
12-5.9 inch.  
16-37-mm AA.  
Plus various smaller.

Torpedo tubes: None.

Airplanes: 4.

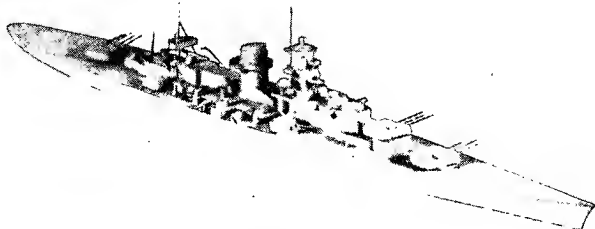
GERMAN  
NAVY



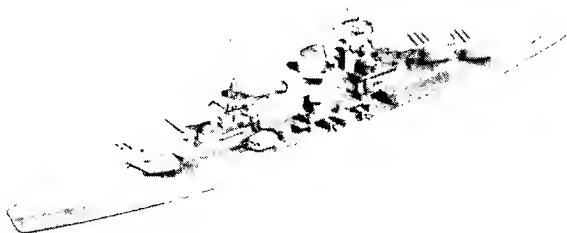
Changes suspected but none confirmed.

## IDENTIFICATION OF GERMAN NAVAL SHIPS

### BATTLESHIP SCHARNHORST



45°.



135°. Depression angle 15°.

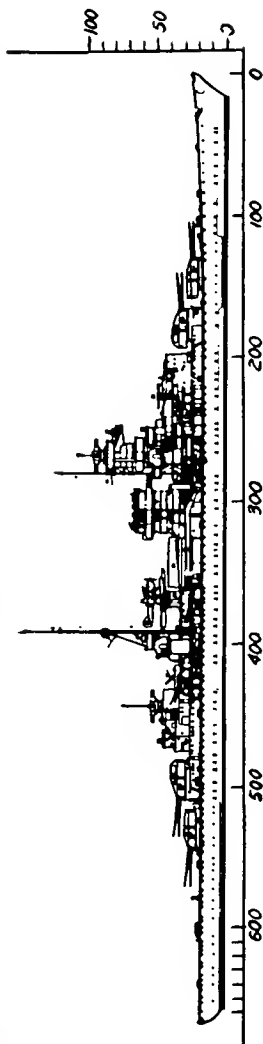
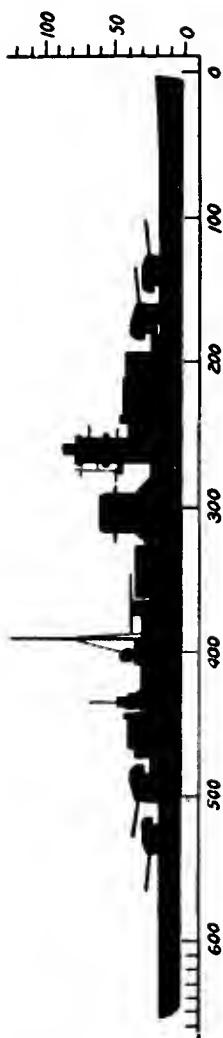
Description: 26,000 tons.  
742 feet (water-line) by 99 feet by 25 feet draft.  
30 knots (?).

Guns: 9-11 inch.  
14-4.1 inch.  
12-5.9 inch.  
16-37-mm AA.  
Plus various smaller.

Torpedo tubes: None.

Airplanes: 4.

GERMAN  
NAVY



Changes (note plan above).

ADMIRAL HIPPER

PRINZ EUGEN and SEYDLITZ not shown

# IDENTIFICATION OF GERMAN NAVAL SHIPS

## HEAVY CRUISERS HIPPER CLASS

### COMPARISON HIPPER CLASS (CA)

HIPPER  
PRINZ EUGEN  
SEYDLITZ

Description: 10,000 tons.  
Hipper: 640 feet by 70 feet by 16 feet draft.  
Others: 655 feet by 71 feet by 15 feet draft.  
33 knots.

Guns: 8-8 inch.  
12-4.1 inch.  
12-37-mm AA.  
Various smaller.

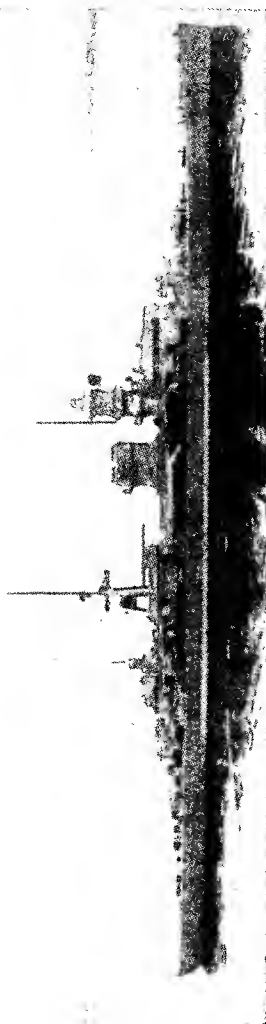
Torpedo tubes: 12.

Airplanes: 3.

Remarks: HIPPER—Clipper bow, slanting stack added.  
PRINZ EUGEN—Same as HIPPER, save first pair of  
AA directors moved aft and on stack platform.  
SEYDLITZ—May be similar to above, but not confirmed.

MILITARY INTELLIGENCE

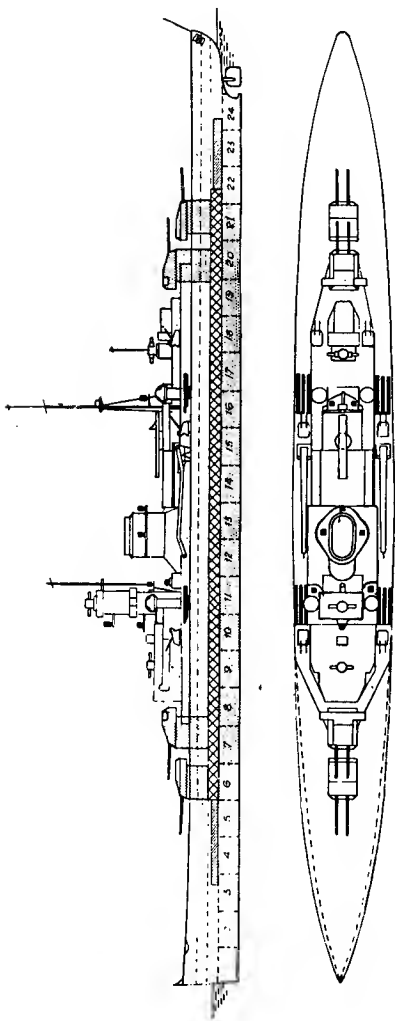
GERMAN  
NAVY



HIPPER

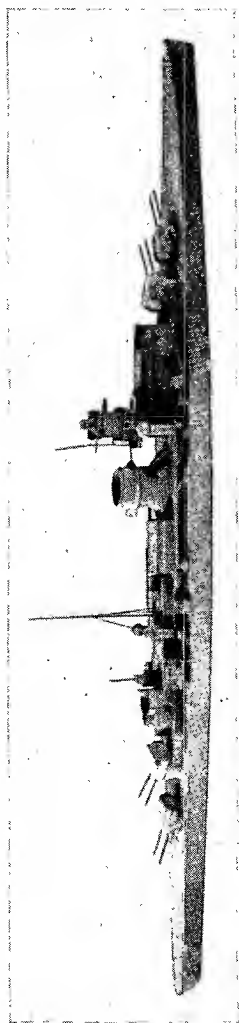
IDENTIFICATION OF GERMAN NAVAL SHIPS

HEAVY CRUISERS  
HIPPER CLASS





GERMAN  
NAVY

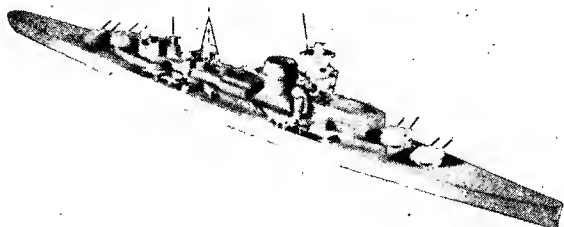


90°.

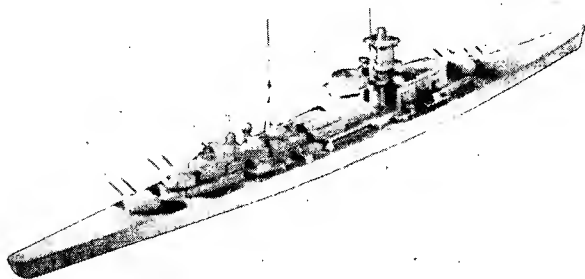
ADMIRAL HIPPER

IDENTIFICATION OF GERMAN NAVAL SHIPS

HEAVY CRUISER  
ADMIRAL HIPPER



45°.



135°. Depression angle 15°.

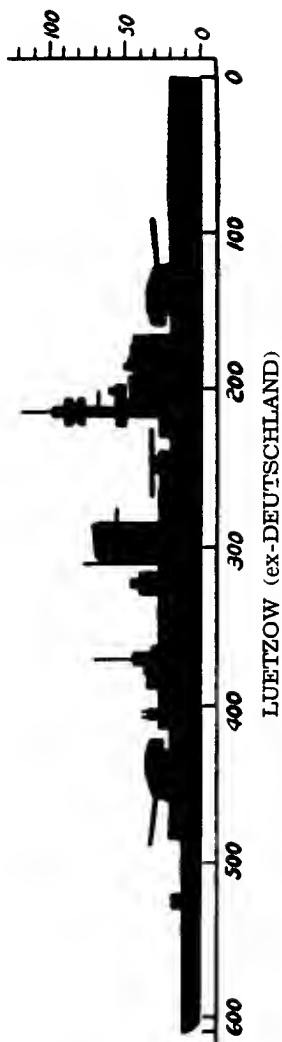
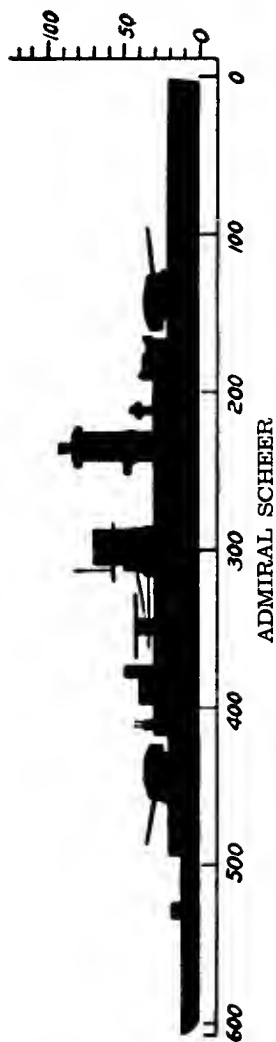
Description: 10,000 tons.  
640 feet by 70 feet by 16 feet draft.  
30 knots.

Guns: 8-8 inch.  
12-4.1 inch.  
12-37-mm AA.  
Various smaller.

Torpedo tubes: 12.

Airplanes: 3.

GERMAN  
NAVY



IDENTIFICATION OF GERMAN NAVAL SHIPS

ARMORED SHIPS  
POCKET BATTLESHIP CLASS

COMPARISON  
POCKET BATTLESHIP CLASS

ADMIRAL SCHEER  
LUETZOW

Description: 10,000 tons.  
610 feet (over-all) by 70 feet by 22 feet draft.  
26 knots.

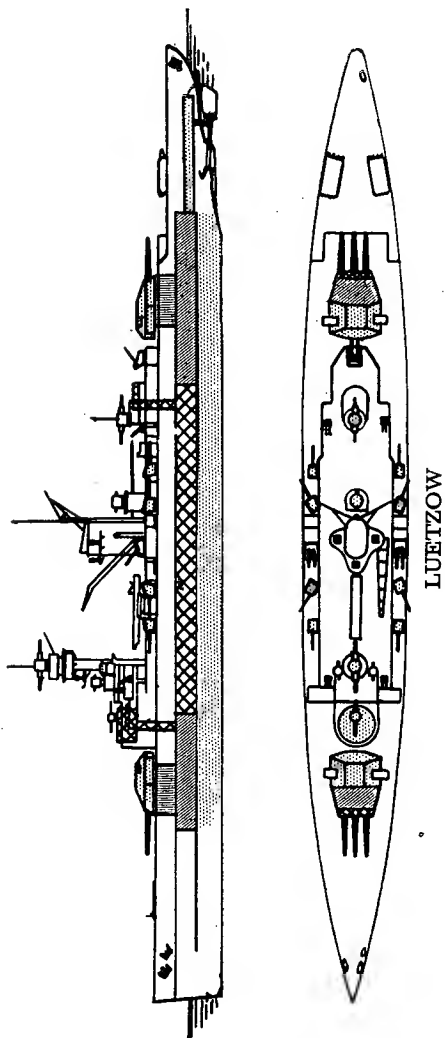
Guns: 6-11 inch.  
8-5.9 inch.  
6-4.1 inch.  
8-3 pound AA.  
10-machine guns.

Torpedo tubes: 8.

Airplanes: 2.

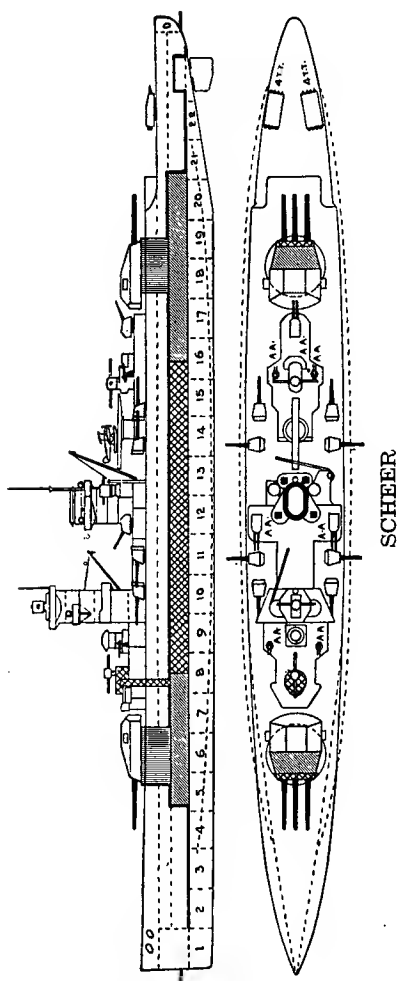
Remarks: ADMIRAL SCHEER—Report addition of clipper bow,  
slanting stack cap, and short mainmast.  
LUETZOW—No reported changes but some suspected.

GERMAN  
NAVY

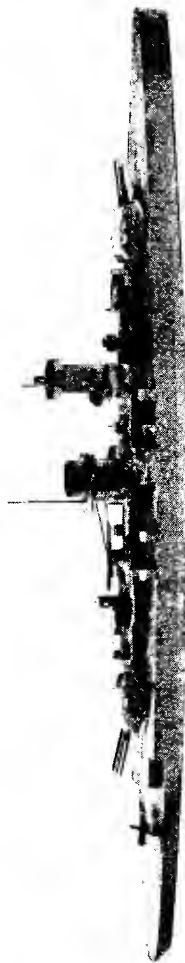


IDENTIFICATION OF GERMAN NAVAL SHIPS

ARMORED SHIPS  
POCKET BATTLESHIP CLASS



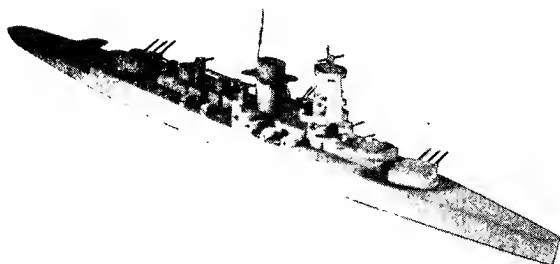
GERMAN  
NAVY



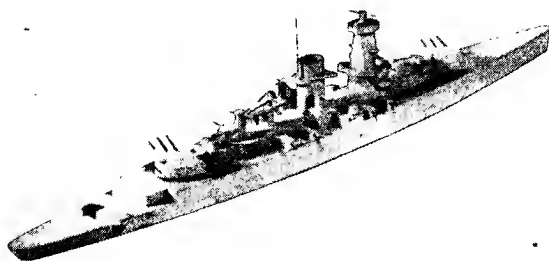
ADMIRAL SCHEER

# IDENTIFICATION OF GERMAN NAVAL SHIPS

## POCKET BATTLESHIPS ADMIRAL SCHEER



45°.



135°. Depression angle 15°.

Description: 10,000 tons.  
26 knots.

Guns: 6-11 inch.  
6-4.1 inch.  
8-5.9 inch.  
8-3 pound AA.  
10-machine guns.

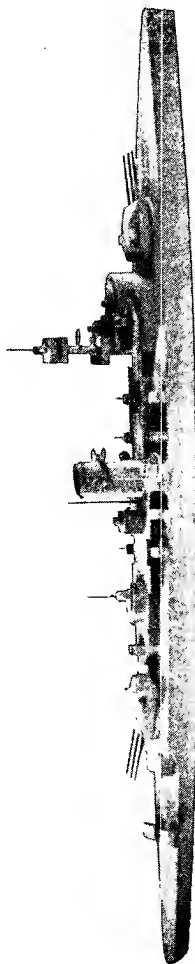
Torpedo tubes: 8.

Airplanes: 2.

Remarks: Report addition of clipper bow, slanting stack cap,  
and short mainmast.



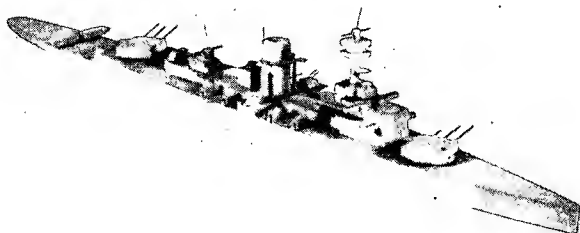
GERMAN  
NAVY



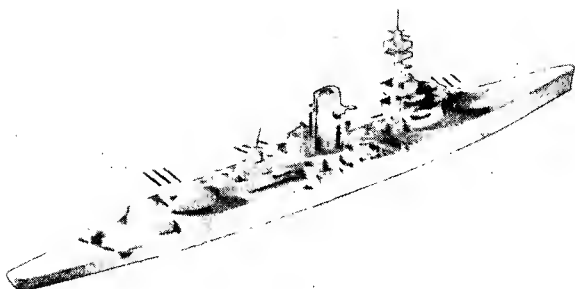
LUETZOW

IDENTIFICATION OF GERMAN NAVAL SHIPS

POCKET BATTLESHIPS  
LUETZOW



45°.



135°. Depression angle 15°.

Description: 10,000 tons.  
26 knots.

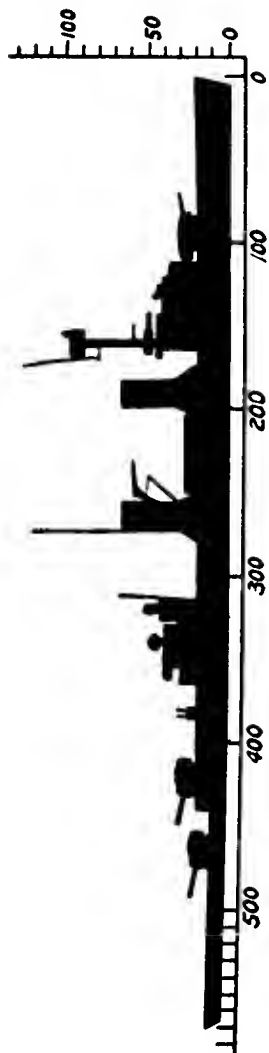
Guns: 6-11 inch.  
6-4.1 inch.  
8-5.9 inch.  
8-3 pound AA.  
10-machine guns.

Torpedo tubes: 8.

Airplanes: 2.

Remarks: No reported changes but some suspected.

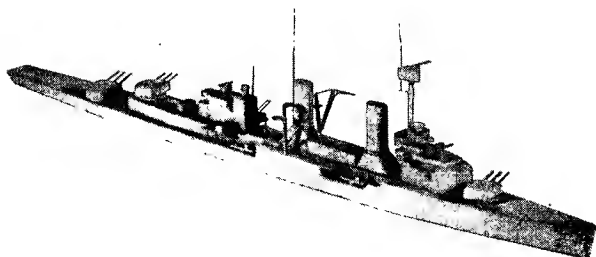
GERMAN  
NAVY



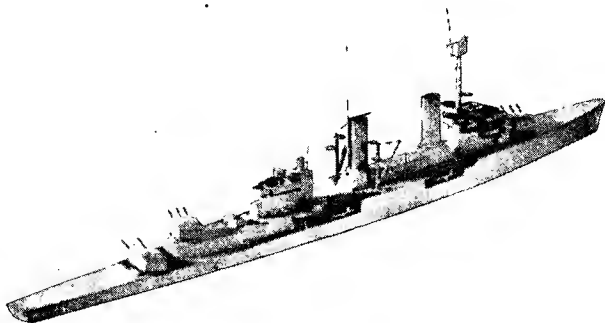
90°. KÖLN

IDENTIFICATION OF GERMAN NAVAL SHIPS

CRUISER  
KÖLN



45°.



135°. Depression angle 15°.

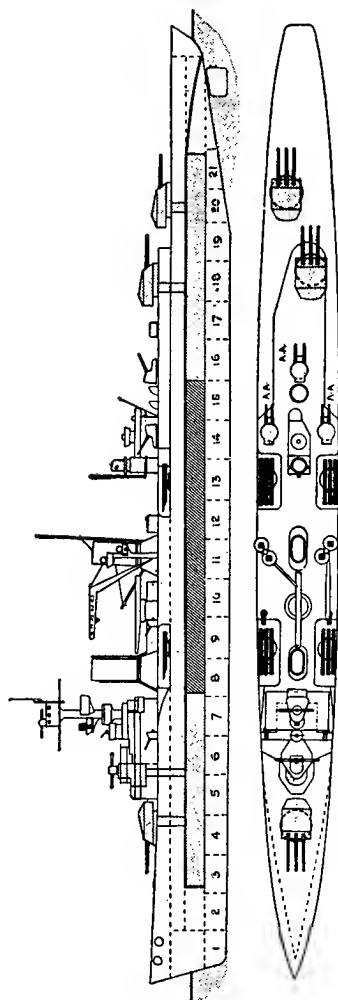
Description: 6,000 tons.  
570 feet by 50 feet by 18 feet draft.  
32 knots.

Guns: 9-5.9 inch, .50 caliber.  
8-3 pound AA.  
6-3.5 inch AA.  
4-machine guns.

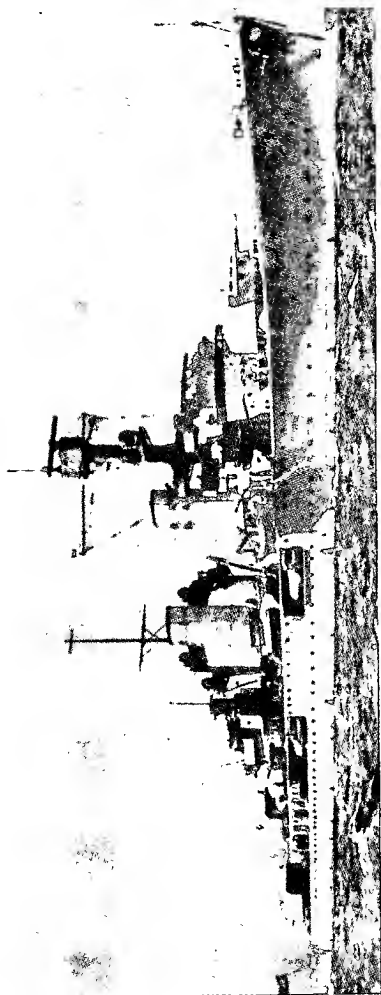
Torpedo tubes: 12.

Airplanes: 2.

GERMAN  
NAVY

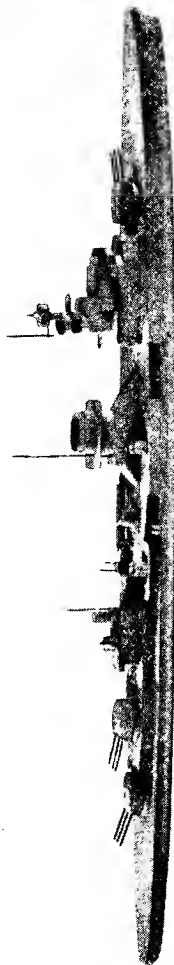
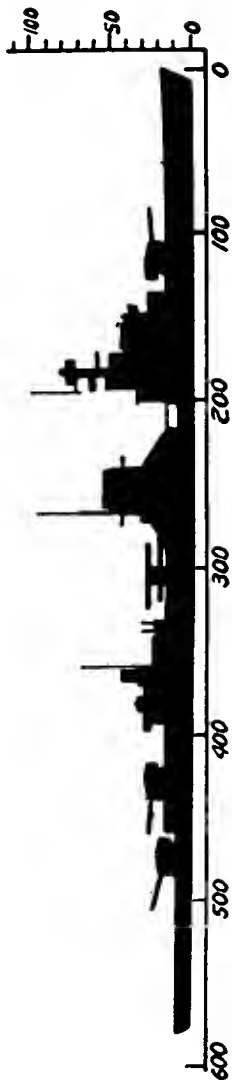


CRUISER  
KÖLN



KÖLN

GERMAN  
NAVY

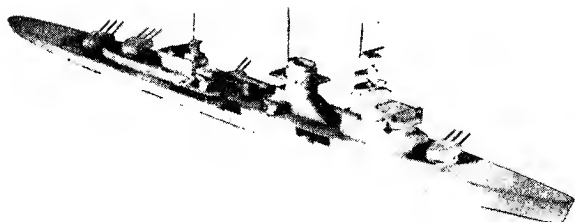


NÜRNBERG

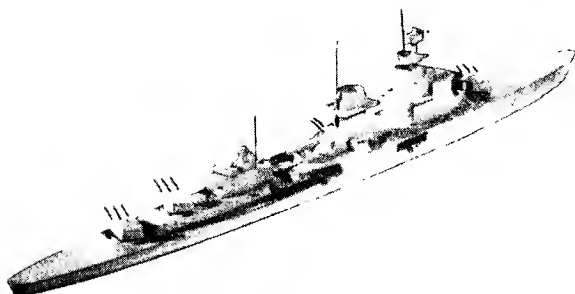
No reported changes.

IDENTIFICATION OF GERMAN NAVAL SHIPS

CRUISER  
NÜRNBERG



45°.



135°. Depression angle 15°.

Description: 6,000 tons.  
558 feet (plimsoll point) by 54 feet by 15 feet draft.  
32 knots.

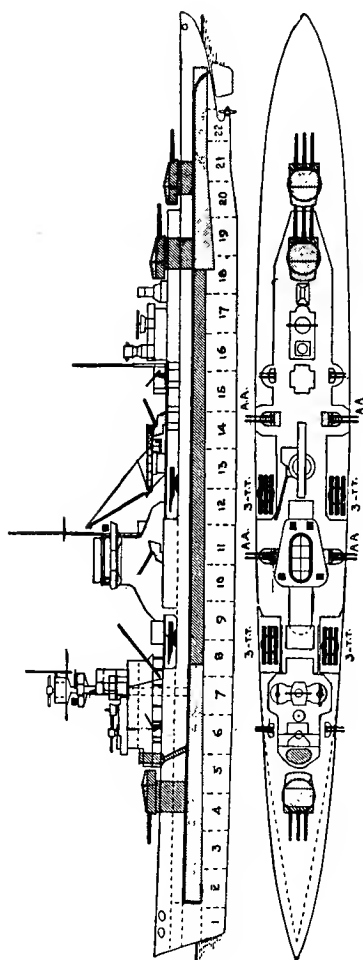
Guns: 9-5.9 inch.  
8-3.5 inch.  
8-3 pound AA.  
4-machine guns.

Torpedo tubes: 12.

Airplanes: 2.

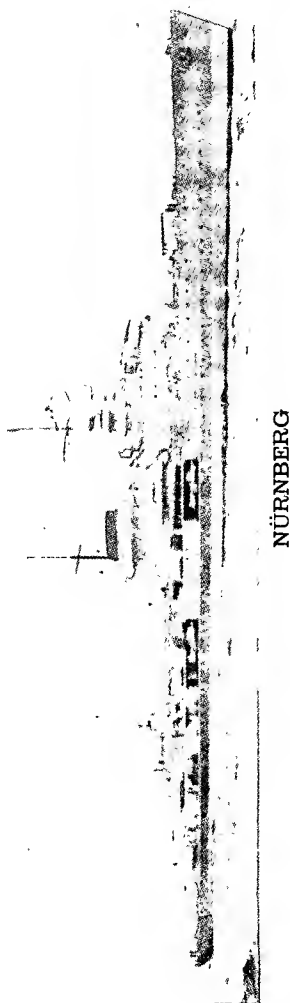


GERMAN  
NAVY

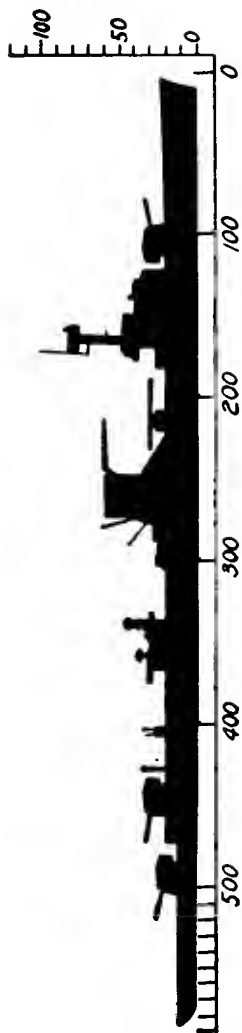


IDENTIFICATION OF GERMAN NAVAL SHIPS

CRUISER  
NÜRNBERG



GERMAN  
NAVY



LEIPZIG

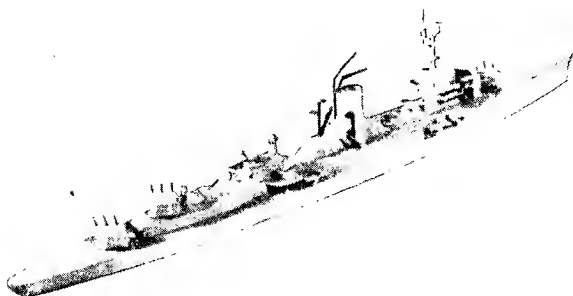
This ship may have been sunk December 13, 1939.

IDENTIFICATION OF GERMAN NAVAL SHIPS

CRUISER  
LEIPZIG



45°.



135°. Depression angle 15°.

Description: 6,000 tons.  
580 feet (over-all) by 54 feet by 16 feet draft  
32 knots.

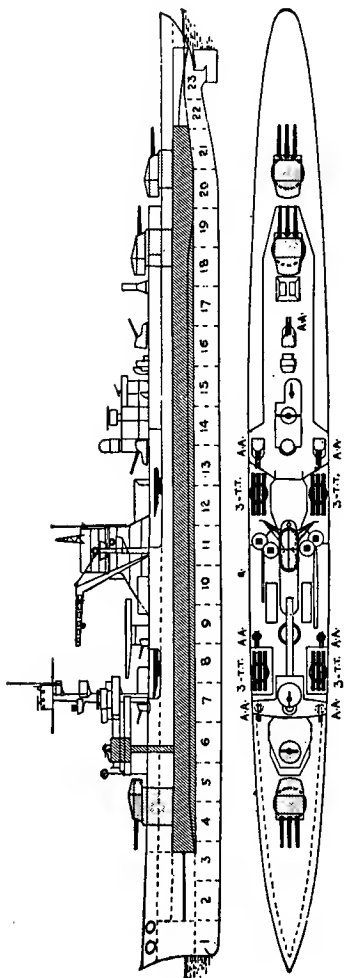
Guns: 9-5.9 inch. .50 caliber.  
8-3 pound AA.  
4-machine guns.  
6-3.5 inch AA.

Torpedo tubes: 12.

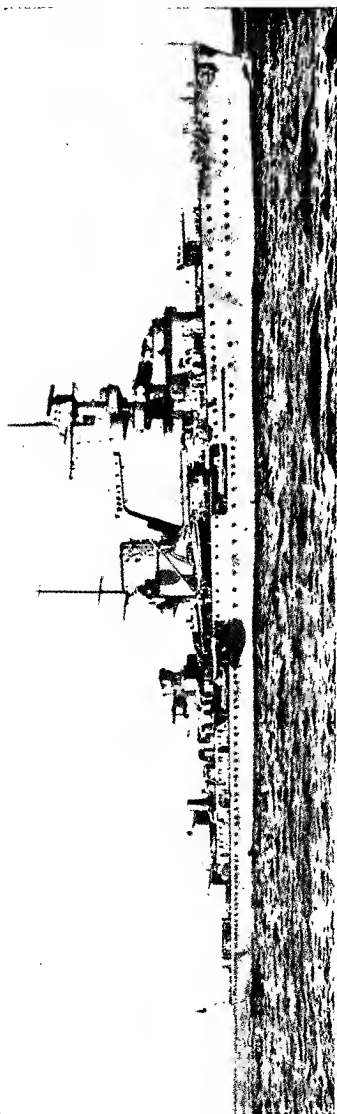
Airplanes: 2.

# MILITARY INTELLIGENCE

## GERMAN NAVY

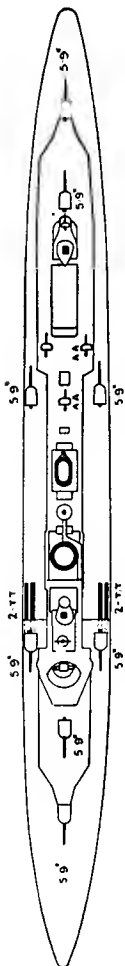


CRUISER  
LEIPZIG



LEIPZIG

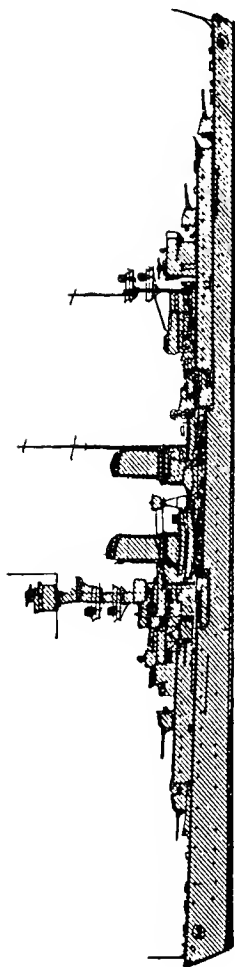
GERMAN  
NAVY



EMDEN

IDENTIFICATION OF GERMAN NAVAL SHIPS

CRUISER  
EMDEN



Description: 5,400 tons.  
509 feet (over-all) by  
47 feet by 18 feet  
draft.  
29 knots.

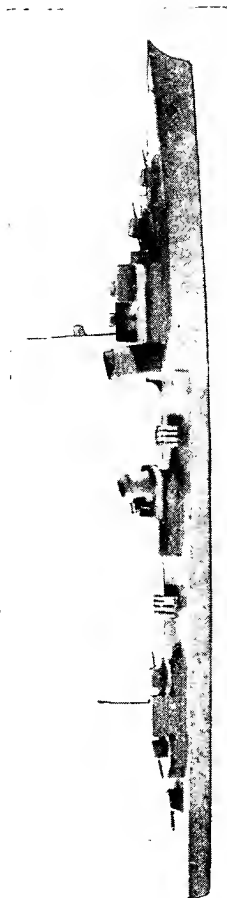
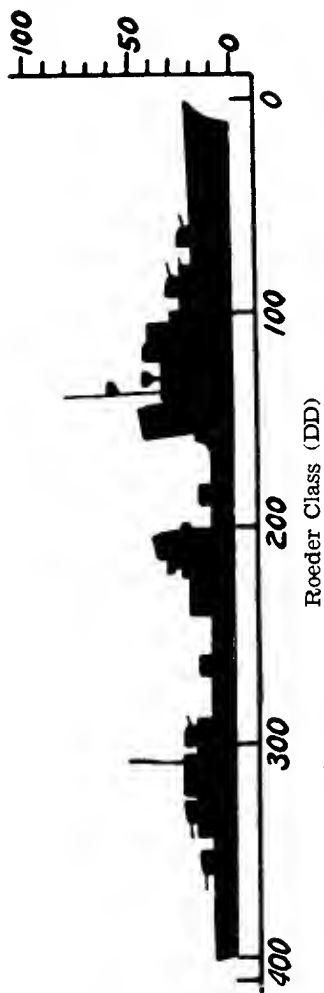
Guns: 8-5.9 inch, 45 caliber.  
3-3.5 inch AA.  
4-machine guns.

Torpedo tubes: 4.

Airplanes: None.



GERMAN  
NAVY

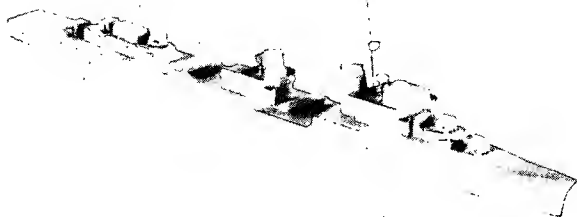


DIETHER VON ROEDER

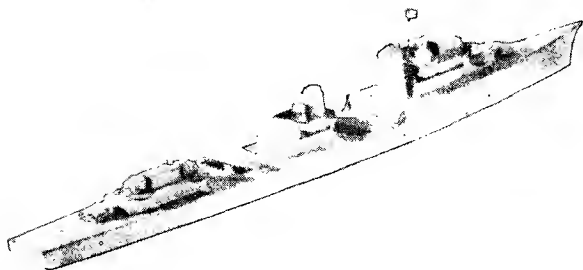


IDENTIFICATION OF GERMAN NAVAL SHIPS

DESTROYER  
DIETHER VON ROEDER



45°.



135°. Depression angle 15°

DIETHER VON ROEDER  
KARL GALSTER

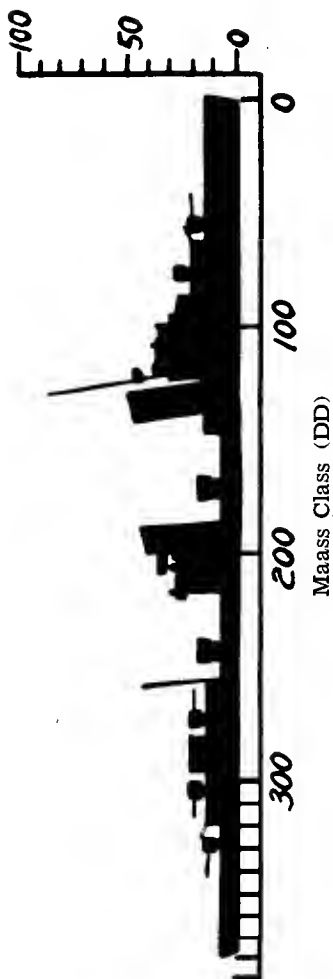
Description: 1,811 tons.  
384 feet by 39 feet by (?).  
36 knots.

Guns: 5-5 inch.  
4-20-mm AA.  
4-37-mm AA.

Torpedo tubes: 8.

Airplanes: None.

GERMAN  
NAVY



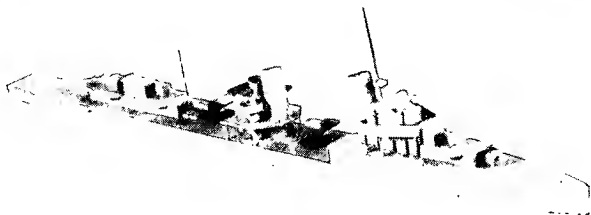
LEBERECHT MAASS

# IDENTIFICATION OF GERMAN NAVAL SHIPS

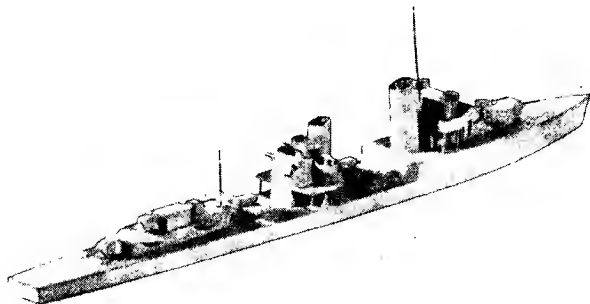
## DESTROYER LEBERECHT MAASS BEITZEN CLASS

GEORGE THIELE  
RICHARD BEITZEN  
PAUL JACOBI  
THEODOR RIEDEL  
HERMAN SCHOENAN

BRUNO HEINEMAN  
HANS LODY  
FRIEDRICH IHN  
ERICH STEINBRINCK  
FRIEDRICH ECKOLDT



45°.



135°. Depression angle 15°.

Description: 1,625 tons.  
374 feet by 37 feet by (?).  
36 knots.  
Guns: 5-5 inch.  
4-20-mm AA.  
4-37-mm AA.  
Torpedo tubes: 8.  
Airplanes: None.  
Remarks: Funnels should be higher and have more prominent stack caps.

MILITARY INTELLIGENCE

GERMAN  
NAVY



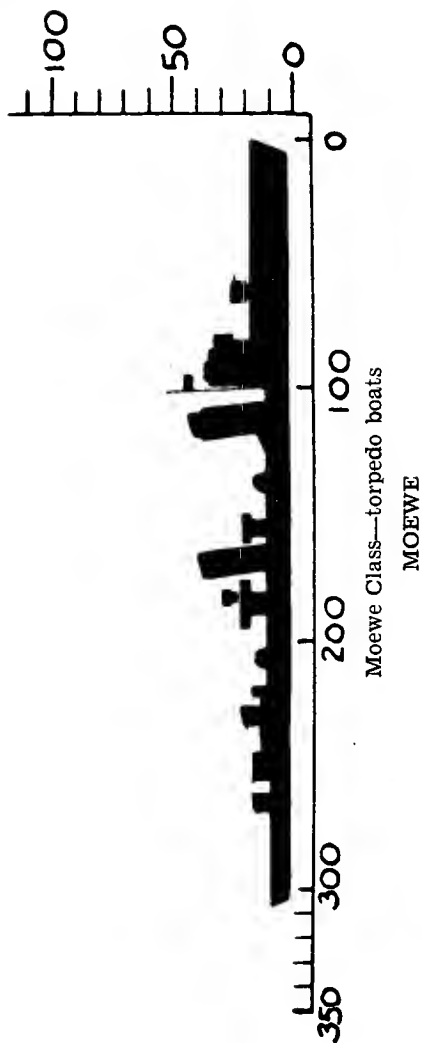
IDENTIFICATION OF GERMAN NAVAL SHIPS

DESTROYER  
BEITZEN CLASS



THEODOR RIEDEL

GERMAN  
NAVY



# IDENTIFICATION OF GERMAN NAVAL SHIPS

## TORPEDO BOATS MOEWE CLASS

### MOEWE CLASS

#### MOEWE

##### Description:

MOEWE: 800 tons.  
292 feet by 27 feet by (?).  
34 knots.

Guns: 3-4.1 inch, .50 caliber.  
2-1 pound AA.

Remarks: MOEWE class has stack casings carried higher and has slanting tops (at right angles to longitudinal axis of stack); shorter slanting stack caps with first stack closer to foremast.



GERMAN  
NAVY

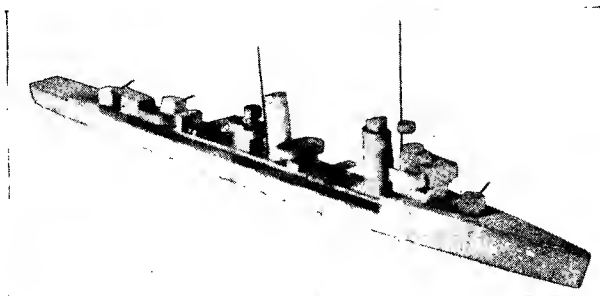


MOEWE

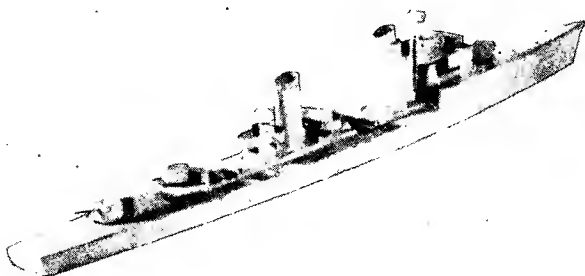
IDENTIFICATION OF GERMAN NAVAL SHIPS

TORPEDO BOATS  
MOEWE

MOEWE ALBATROS  
GREIF SEEADLER  
FALKE KONDOR



45°.



135°. Depression angle 15°.

Description: 800 tons.  
292 feet by 27 feet by (?).  
34 knots.

Guns: 3-4.1 inch, .50 caliber.  
2-1 pound AA.

Torpedo tubes: 2 triple.

MILITARY INTELLIGENCE

GERMAN  
NAVY



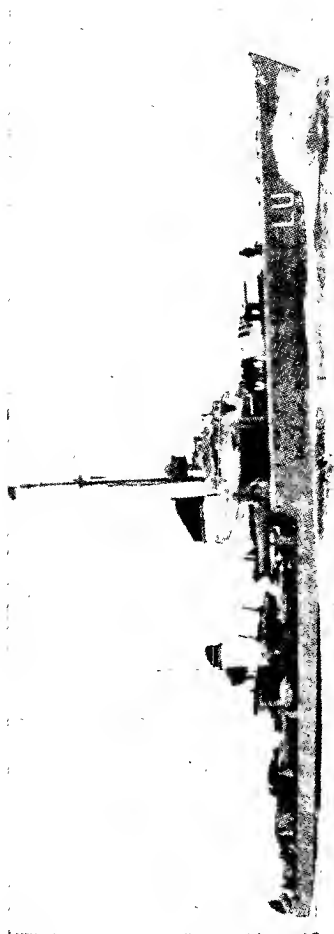
IDENTIFICATION OF GERMAN NAVAL SHIPS

TORPEDO BOATS  
MOEWE CLASS



FALKE

GERMAN  
NAVY



LUCHS

IDENTIFICATION OF GERMAN NAVAL SHIPS

TORPEDO BOATS  
ILTIS CLASS

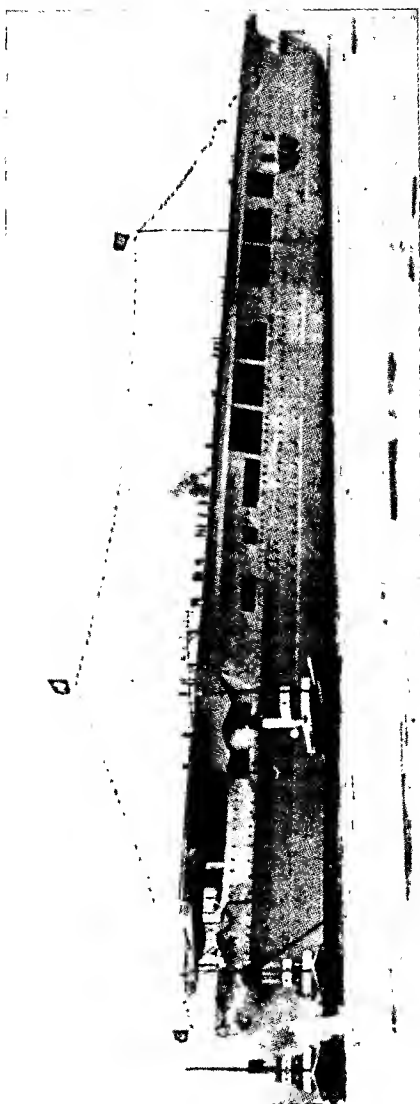
ILTIS	LEOPARD
WOLF	LUCHS
JAGUAR	TIGER

Similar in appearance to Moewe class—see Moewe class for silhouettes.

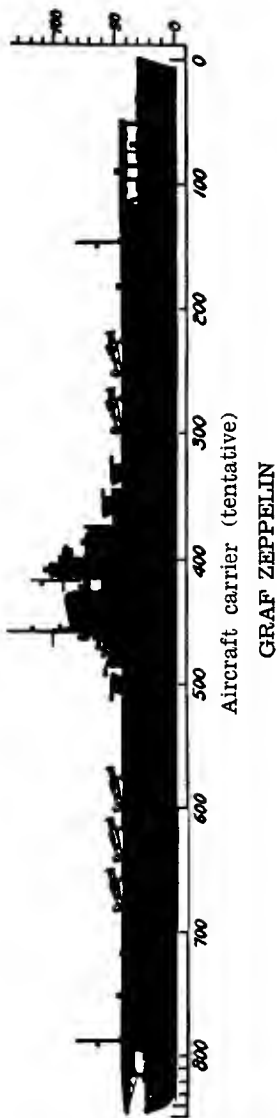
Description: 800 tons.  
304 feet by 28 feet by 9 feet draft.  
34 knots.

Guns: 3—4.1 inch (on Leopard, Luchs, 5 inches).  
2—1 pound AA.

Torpedo tubes: 2 triple.



Launch of GRAF ZEPPELIN



Aircraft carrier (tentative)

GRAF ZEPPELIN

IDENTIFICATION OF GERMAN NAVAL SHIPS

AIRCRAFT CARRIER  
GRAF ZEPPELIN CLASS

GRAF ZEPPELIN CLASS

GRAF ZEPPELIN  
DEUTSCHLAND

Description: 19,250 tons.  
821 feet by 89 feet by (?).  
32 knots.

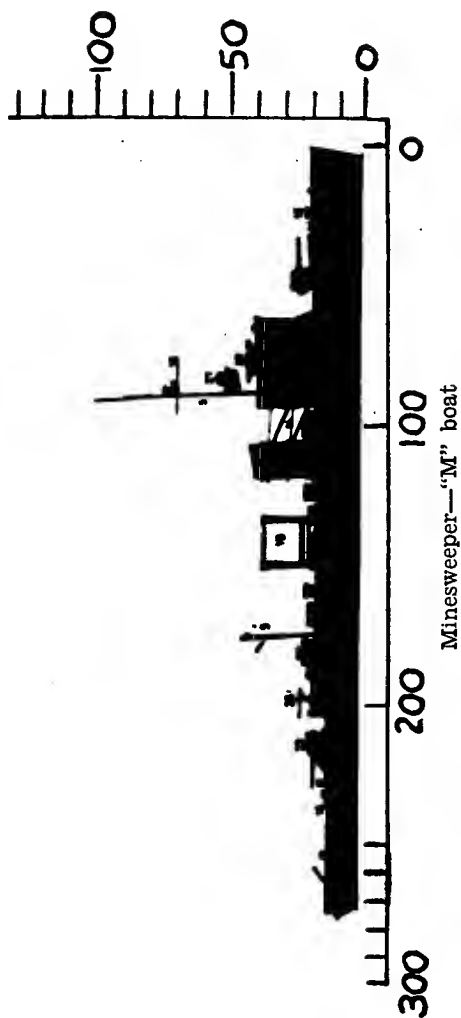
Guns: 16-5.9 inch.  
10-4.1 inch.  
22-37-mm AA.

Torpedo tubes: None.

Airplanes: 40.



GERMAN  
NAVY



# IDENTIFICATION OF GERMAN NAVAL SHIPS

## MINESWEEPER "M" BOAT

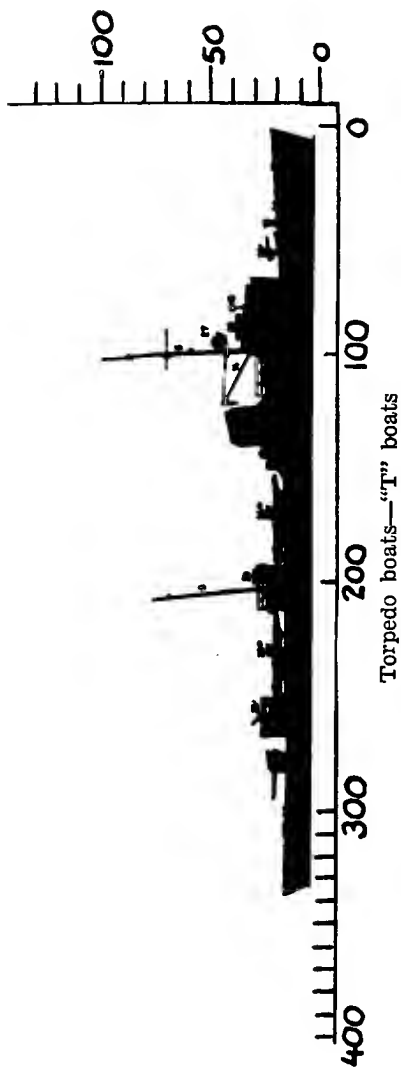
### "M" BOAT CLASS

Description: 600 tons.  
17 knots.

Guns: 2-4.1 inch.  
2-37-mm.

Remarks: Do not confuse with "T" boats. Note marked similarity.

GERMAN  
NAVY



# IDENTIFICATION OF GERMAN NAVAL SHIPS

## TORPEDO BOATS "T" BOAT

### "T" BOAT CLASS

#### "T" BOATS

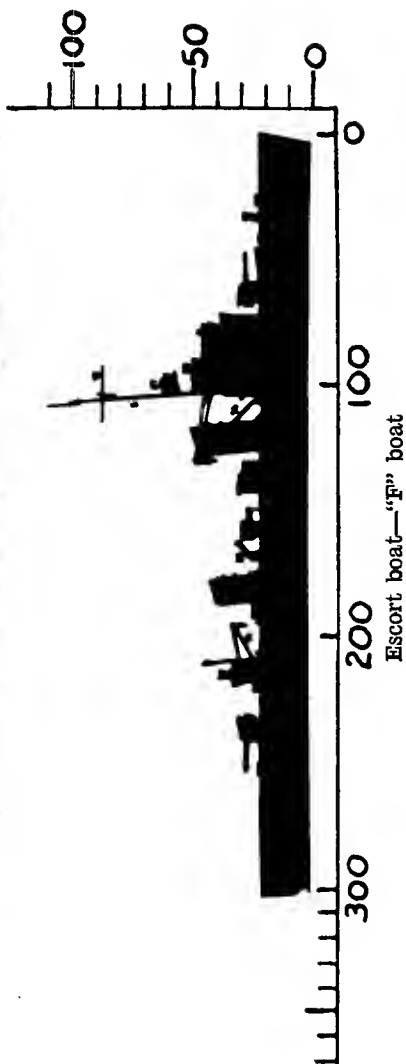
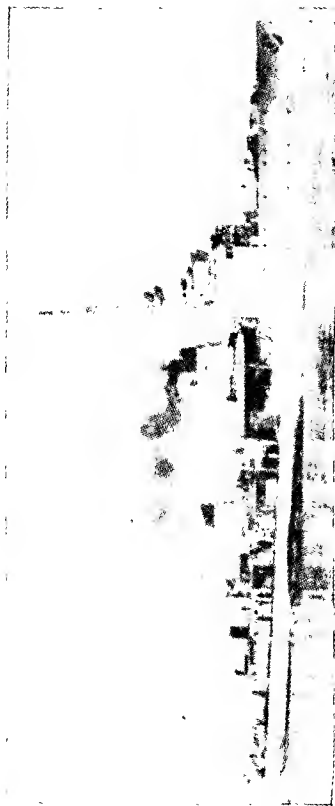
Description: 600 tons.  
267 feet by 29 feet by (?).  
36 knots.

Guns: 1-4.1 inch.  
6-37-mm.

Torpedo tubes: 6.

Remarks: Do not confuse with "M" boats, which class type resembles closely.

GERMAN  
NAVY



# IDENTIFICATION OF GERMAN NAVAL SHIPS

## ESCORT BOAT "F" BOAT

### "F" BOAT CLASS

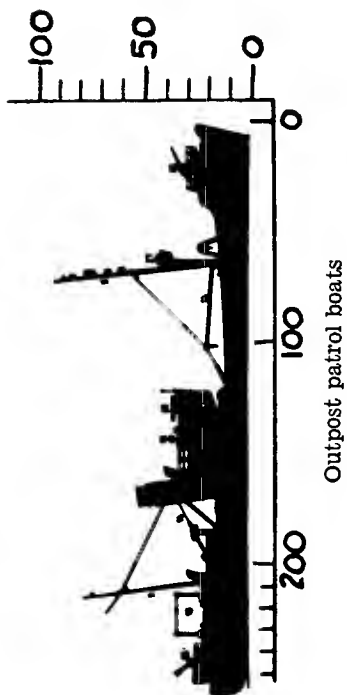
F 1	Hai
F 2	F 7
Koenigin Luise	F 8
F 4	F 9
F 5	F 10

Description: 600 tons.  
250 feet (over-all) by 29 feet by (?).  
28 knots.

Guns: 2-4.1 inch, .50 caliber.  
2-1 pound AA.  
4-37-mm AA.

Remarks: Watch for variations in deck profile. Fitted for  
mine laying.

GERMAN  
NAVY



IDENTIFICATION OF GERMAN NAVAL SHIPS

OUTPOST PATROL BOATS

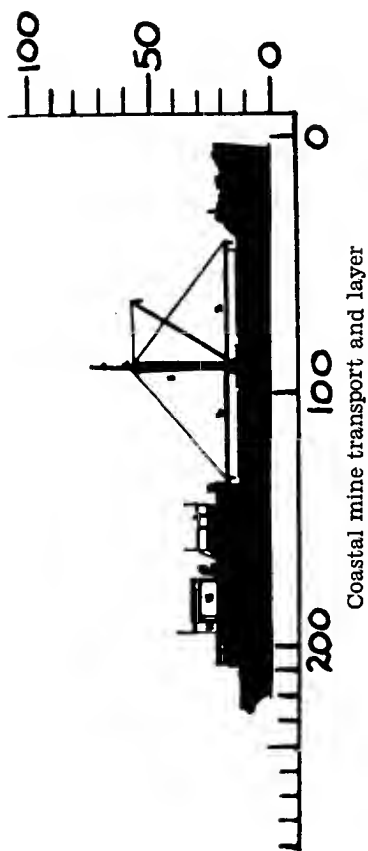
Description: 496 tons.  
125 feet by 23 feet by (?).  
10 knots.

Guns: 1-3.5 inch.  
3-1 pound AA.

Remarks: These are converted fishing trawlers and will vary in  
size and silhouettes.



GERMAN  
NAVY

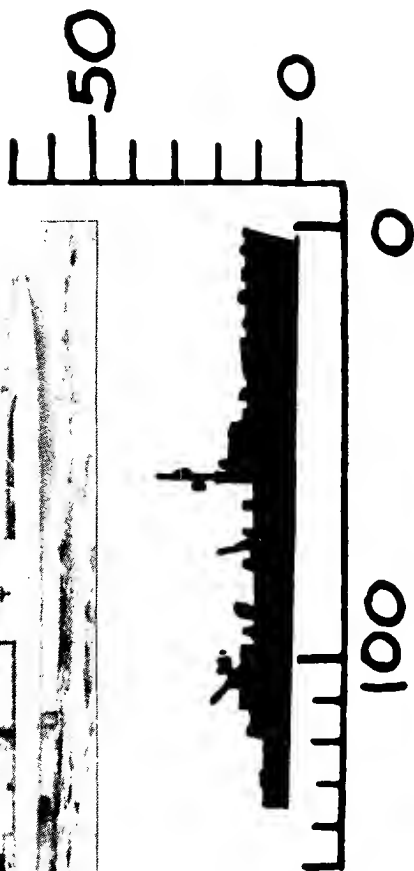
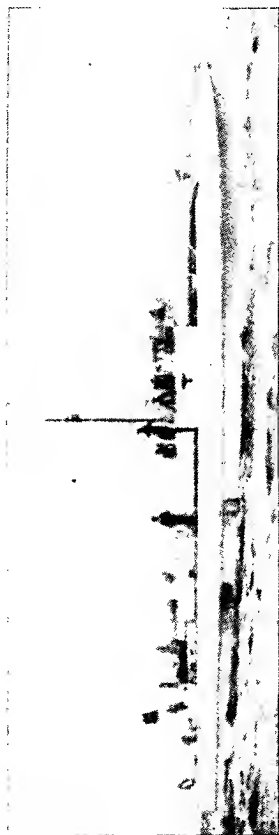


IDENTIFICATION OF GERMAN NAVAL SHIPS

COASTAL MINE TRANSPORT  
AND LAYER

Description: 1,253 tons.  
10 knots.

GERMAN  
NAVY



New type motor torpedo boat  
"S" boat (German designation)  
"E" boat (British designation)

IDENTIFICATION OF GERMAN NAVAL SHIPS

NEW TYPE  
MOTOR TORPEDO BOAT

MOTOR TORPEDO BOAT CLASS

S 6 TO 37  
S 38 TO 57

Description:

S 6 to 37: 62 tons.  
93 feet.  
30-36 knots.

S 38 to 57: 86 tons.  
105 feet.

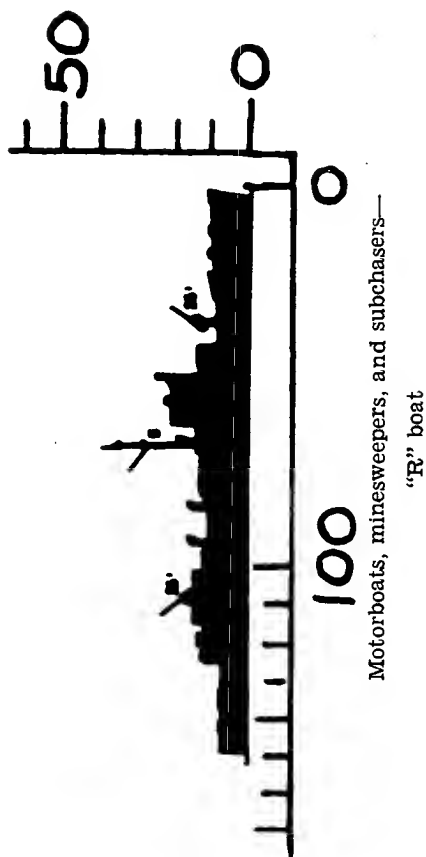
Guns:

S 6 to 37: 2-1 pound AA.  
1-20-mm AA.  
S 38 to 57: 2-47-mm AA.

Torpedo tubes: 2.

Remarks: Vary in size and silhouettes.

GERMAN  
NAVY



**IDENTIFICATION OF GERMAN NAVAL SHIPS**

**MOTORBOATS, MINESWEEPERS,  
and SUBCHASERS—  
“R” BOAT**

**“R” BOAT CLASS**

**“R” BOAT**

**Description:**     90 tons.  
                      18 knots.

**Guns:**             2-1 pound AA.

**Torpedo tubes:** None.

MILITARY INTELLIGENCE

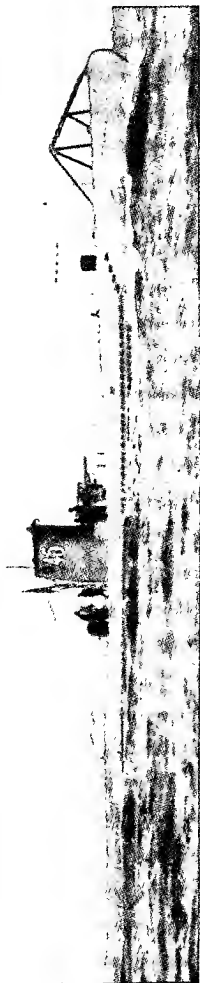
GERMAN  
NAVY

SUBMARINES  
OCEAN GOING TYPES



IDENTIFICATION OF GERMAN NAVAL SHIPS

GERMAN  
NAVY



SUBMARINES  
SEA GOING TYPES





MILITARY INTELLIGENCE

GERMAN  
NAVY



SUBMARINES  
COASTAL TYPES

